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ABSTRACT

MEDLARS (Medical Literature Analysis and Retrieval System) a computer-based system is operated at the National Library of Medicine. The principal objective of Medlars is to provide references to the biomedical literature to researchers, clinicians, and other health professionals. This is accomplished through: (1) preparation of citations for publication in "Index Medicus" and "Current Catalog," (2) preparation of recurring bibliographies on specialized subjects of wide interest and (3) preparation of retrospective, one-time bibliographies (demand searches). This guide is designed to assist the user in obtaining a demand search in the area of his interest. Efficient use of this service requires that the potential user understand something about the system as a whole: its contents, the controlled vocabulary, and methods of indexing and updating the files. (Author/NH)

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NATIONAL LIBRARY OF MEDICINE

GUIDE TO MEDLARS SERVICES

A brief description of the system with emphasis on the automated bibliographic search service.

LI 003 169

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Public Health Service
National Institutes of Health

DHEW Publication No. (NIH) 72-255
(Revised August 1971)

National Library of Medicine
8600 Rockville Pike
Bethesda, Md. 20014

I

The National Library of Medicine (NLM) collects, organizes, and makes available biomedical information to researchers, educators, practitioners, and other health professionals.

The Library serves as a national repository for biomedical literature, and provides extensive bibliographic, reference, and interlibrary loan services. The NLM collection comprises nearly 1,300,000 biomedical books, theses, journals, pamphlets, prints, microfilms, and audiovisual materials.

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I. INTRODUCTION

MEDLARS (Medical Literature Analysis and Retrieval System), a computer-based system in operation at the National Library of Medicine, has been designed to achieve rapid bibliographic access to the Library's vast store of biomedical journal information. It became operational in January 1964 with the publication of the first computer-produced issue of *Index Medicus,* a comprehensive, subject-author index to articles from approximately 2,300 of the world's biomedical journals.

The principal objective of MEDLARS is to provide references to the biomedical literature to researchers, clinicians, and other health professionals. This is accomplished through:

a. Preparation of citations for publication in *Index Medicus* and *Current Catalog.* (See list of NLM publications, p. 16.)

b. Preparation of Recurring Bibliographies on specialized subjects of wide interest. (See list of Recurring Bibliographies, p. 18.)

c. Preparation of retrospective, one-time bibliographies (demand searches). This is achieved by rapid search through the file of citations to journal articles, in response to specific requests submitted by health professionals. (When necessary, this service may be made available to others whose work requires access to biomedical information.)

This Guide is designed to assist the user in obtaining a demand search in the area of his interest. Efficient use of this service requires that the potential user understand something about the system as a whole: its contents, the controlled vocabulary, and methods of indexing and updating the files. (A further explanation of MEDLARS is contained in the booklet, *The Principles of MEDLARS;* see publications list for information for ordering from the Superintendent of Documents.)

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2. FILE CONTENTS

As of July 1970, the MEDLARS magnetic tapes contained about 1,254,200 citations to articles published since 1963. Approximately 200,000 citations are currently added each year from 2,300 biomedical periodicals, with about one-half of these articles in languages other than English.

In the selection of journals for indexing, the National Library of Medicine is advised by a group of distinguished physicians, medical editors, and medical librarians. The indexed journals are listed in the January issue of *Index Medicus* and separately in the *List of Journals Indexed in Index Medicus* (see National Library of Medicine Publications List).

Each citation in the MEDLARS file contains a number of elements. Of these, the following appear in the printout of a Demand Search:

1. Authors' names.
2. English title and/or English translation and vernacular.
3. Abbreviated journal title.
4. Volume, page, date of publication.
5. Language abbreviation for articles other than those in English.
6. Subject headings describing the contents of the article, to include type of article such as review, case report, in vitro studies, human or animal studies.

3. MeSH

Medical Subject Headings (MeSH) is the Library's authority list of technical terms used for indexing biomedical journal articles, cataloging books, and bibliographic search of the National Library of Medicine's computer-based citation file. MeSH is published annually as Part 2 of the January issue of *Index Medicus,* and also with the *Cumulated Index Medicus.*

MeSH is divided into two sections. The Alphabetic List contains the subject headings and cross-references arranged in alphabetic order. The Categorized Lists display the subject headings in separate, broad subject categories showing generic relationships, with an alphanumeric designation for each category and subcategory.

You are urged to refer to the MeSH introduction for further details.

4. INDEXING AND UPDATING OF FILES

Material from journals covered by MEDLARS undergoes careful analysis and indexing prior to being input to the magnetic tape file. This function is performed by highly trained medical literature analysts.

Original articles are indexed, as well as those letters, editorials, biographies, and obituaries that have substantive content. Abstracts of articles are never indexed. In certain journals which cover fields other than biomedicine, such as *Science,* only those articles related to biomedicine are selected for inclusion in MEDLARS.

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A cardinal rule of indexing is to use the most specific MeSH term available, e.g., articles concerning anthracenes are to be found in *Index Medicus* under the subject heading ANTHRACENES, while an article concerning a specific hydrocarbon which is not yet in the vocabulary is listed in *Index Medicus* under the broader term HYDROCARBONS.

If the hydrocarbon is being reported as an air pollutant, the term AIR POLLUTION is also assigned. MeSH terms of maximum specificity, then, are used for indexing journal articles, emphasizing original findings or data, significant negative findings, anatomic structures, organisms, diseases, chemicals or drugs, analytic technics, therapeutic methods, epidemiologic aspects, etc. All articles are also analyzed for additional items (e.g., age groups of patients, pregnancy, whether human or animal studies, case reports, geography, clinical research, etc.).

Each article is cited in *Index Medicus* only under those subject headings which represent the most important concepts of the article. All subject headings are stored in MEDLARS for future use in machine retrieval.

5. DEMAND SEARCH

A MEDLARS demand search is a computer-produced bibliography tailored to meet the information needs of an individual requester.

If, after conducting a preliminary literature search in *Index Medicus* and other published bibliographies, you still have specific information needs, you may request a MEDLARS demand search. Your request should be submitted on a MEDLARS search request form (enclosed). Additional forms are available through your local medical library or nearest MEDLARS center.

The success or failure of MEDLARS (or any other information retrieval system) is dependent primarily upon intellectual effort. This intellectual effort is put into the system by the literature analysts, the search analysts, the vocabulary specialists, and, very importantly, *by you, the user.* The computer merely acts as a matching device. It matches the index terms that have been assigned to articles in the file of citations against the combination of index terms that have been used to translate your request into the same language (the vocabulary of the system, MeSH). These combinations of terms are called search formulations. When a match occurs, a citation is retrieved.

Generally speaking, the more effort you are willing to put into the use of MEDLARS, the better the result is likely to be. For this reason we ask you to familiarize yourself with *Medical Subject Headings,* the controlled vocabulary of MEDLARS, and *Index Medicus,* your primary source for finding citations to journal articles listed under those medical subject headings.

5a. Restrictions and Limitations

There are, of course, some restrictions on the use of the file, as well as various types of information which MEDLARS is not designed to provide. It is important that you recognize these restrictions; we therefore ask you that you not request:

1. Searches of the total MEDLARS file. Although the MEDLARS file dates back to mid-1963, experience has shown that most MEDLARS users are satisfied with a search of the more recent segment of the file. The Library, therefore, began limiting routine searches of the MEDLARS file to a period of 2½ to 3½ years. For references to articles published before mid-1963, consult earlier volumes of *Cumulated Index Medicus* and *Current List of Medical Literature.*

2. Author searches. The present MEDLARS is not designed to search on authors' names. Author indexes are available in *Index Medicus* and *Cumulated Index Medicus.* Authors' addresses are not provided, but can frequently be located in directories.

3. Verification of specific citations. This information is readily available in *Index Medicus* and elsewhere.

4. Citations on a single subject, or concepts which may be easily coordinated, e.g., bladder neoplasms, cardiovascular complications in pregnancy. These citations may be found readily in *Index Medicus* under the appropriate headings (BLADDER NEOPLASMS; PREGNANCY COMPLICATIONS, CARDIOVASCULAR).

5. Data or factual information. Standard handbooks, encyclopedias, and monographs should be consulted for specific data or facts.

6. Subject matter not in scope of *Index Medicus.* Requests on subjects such as animal husbandry or general computer programming should be directed to specialized indexes (*Bibliography of Agriculture; Computer Abstracts*).

7. For references to proceedings of congresses, symposia, and similar materials, as well as monographs and serials, consult the *National Library of Medicine Current Catalog* (see list of NLM publications).

8. Translation of articles. Local librarians should be consulted for sources of translations or names of translators.

5b. Preparing the Request Form

To obtain a bibliography which provides information as relevant and comprehensive as possible, requests should be submitted on MEDLARS search request forms. Two forms have been inserted in the center of this booklet; additional forms are available from local medical libraries, your nearest MEDLARS center, and the National Library of Medicine. Requests forms must be filled out carefully and completely. Forms should be typewritten or clearly handprinted. Instructions on how to fill out a request form follow.

MEDLARS SEARCH REQUEST

DATE: 9/14/69

Is this your first request to MEDLARS? [x] YES [ ] NO

1. INDIVIDUAL WHO WILL ACTUALLY USE THIS BIBLIOGRAPHY

First	Middle	Last Name	TELEPHONE NO.
John	Stuart	Reynolds, Ph.D.	301 - 873-9322

2. TITLE: Assistant Professor of Environmental Health

3. ORGANIZATION *(Department, Bureau, Branch, Division, etc.)*: Department of Environmental Health
School of Hygiene

4. ORGANIZATION *(University, Corporation, Company, etc.)*: The Johns Hopkins University

5. STREET ADDRESS AND CITY: 611 N. Wolfe Street Baltimore

6. STATE AND ZIP CODE: Maryland 21205

7. REQUEST SUBMITTED BY *(If different from above)*: Mary Hartshorn, Librarian

TELEPHONE NO.: 301 - 873-5221

8. SEARCH ANALYST *(Leave Blank)*

The requester identification (items 1 through 7) should include your full name, degree, telephone number, position, organization, and full address. Please be certain to include your telephone number so that the search analyst who handles your request may contact you if necessary.

ALL OF THE QUESTIONS THAT FOLLOW ARE DESIGNED TO PROVIDE INFORMATION NEEDED TO DEVELOP A BIBLIOGRAPHY THAT IS RESPONSIVE TO YOUR NEEDS. YOUR CARE IN PROVIDING FULL INFORMATION WILL AFFECT THE USEFULNESS OF THE CITATIONS THAT YOU WILL RECEIVE.

9. DETAILED STATEMENT OF REQUIREMENTS: Please describe, in your own words, the subject matter for which the search is to be conducted. Be as specific as possible. Define any terms that may have special meaning in your request. Also if there are points NOT to be included, please state these.

I am interested in articles on the effects of atmcspheric contamination on health, specifically studies on air contaminants such as hydrocarbons and other carcinogens.

I am not particularly interested in smoking as it affects health, but articles on primary lung cancer in non-smokers are of interest to me.

Under item 9, state your needs without being limited by any preconceived ideas about what MEDLARS can or cannot do for you. Do not attempt to translate your question into words that you feel may be easier for a non-specialist to understand, because you may distort your actual intention. It is the MEDLARS analyst's job to understand your request in your own terms. If necessary, he will call you for clarification. Please avoid the use of terms that are either more general or more specific than you really intend. Do not say aromatic hydrocarbons if you mean anthracenes; do not say aromatic hydrocarbons if you are interested in all hydrocarbons.

10.

10. SEARCH PURPOSE: Please indicate the purpose for which this search will be used (e.g., preparation of a book, book chapter, journal article, or review article; for immediate clinical application; ongoing research; prospective research; grant application; paper presented at symposium, etc.). Give specific details that will put your request into context.

I am writing a critical review on carcinogens as air pollutants.

For item 10, you should state fully the purpose for which the search is being requested. This information places your request in the context of that purpose, and materially aids the MEDLARS analyst in preparing your search for processing.

11 a

11. SEARCH LIMITATIONS: Please check all boxes that are appropriate to the scope of your request. State your needs as specifically as possible, even though we may not be able to meet these precise needs in some cases. Your replies will allow the search analyst to design a strategy that, as far as possible, will avoid types of literature that are of no interest to you.

☐ NO RESTRICTIONS

☒ HUMAN SUBJECTS

☐ VETERINARY MEDICINE: If only certain animals or animal groups are of interest, please list these:

☒ ANIMAL EXPERIMENTS: If only certain animals or animal groups are of interest, please list these:

☒ MALE

☒ FEMALE

☒ NORMAL STATE

☐ CLINICAL RESEARCH *(testing of drugs or technics in humans only)*

☒ DISEASED STATE

☐ IN VITRO STUDIES *(of animal or human tissues or fluids only)*

☐ CASE HISTORIES

LANGUAGE RESTRICTIONS:

☒ ACCEPT ALL LANGUAGES

☐ ACCEPT ONLY ENGLISH

☐ ACCEPT CERTAIN LANGUAGES ONLY *(please specify)*

AGE GROUPS: If only certain age groups are of interest, please indicate which ones:

Any age group

GEOGRAPHIC RESTRICTIONS: If only certain regions are of interest, please list these:

No geographic restrictions

It is important that the limitations you desire be stated (item 11). There is no purpose in burdening you with experimental studies if you are interested only in the disease as it occurs naturally in humans, or giving you citations to articles in Japanese or Russian when you read only English and French.

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12. KNOWN RELEVANT PAPERS: Please carry out a preliminary literature search of your own before submitting this request to MEDLARS, and supply full bibliographic citations below for relevant articles you have found. Wherever possible, they should be journal articles published since January 1966. These citations will be used as a guide in retrieving similar citations related to your needs. They will also be used in a later appraisal of the results of this search. If no relevant papers have been found, please state "none found".

a. Anderson DO: The effects of air contamination on health. 3.
Canad Med Ass J 97:802-6, 23 Sep 67

b. Baird VC: Effects of atmospheric contamination on cancer mortality in petroleum refinery employees.
J Occup Med 9:415-20, Aug 67

c. Gross, P, DeTreville RT, Toker EB, et al: Experimental asbestosis. The development of lung cancer in rats with pulmonary deposits of chrysotile asbestos dust.
Arch Environ Health (Chicago) 15:343-55, Sep 67

d. Clemo, GR: Some constituents of city smoke.
Tetrahedron 23:2389-93, May 67

e. Abelson PH: Progress toward abatement of air pollution.
Science 160:257, 19 Apr 68

If you used INDEX MEDICUS for your preliminary search please list the subject headings under which you sought citations:

AIR POLLUTION, CARCINOGENS, ASBESTOSIS, NEOPLASM STATISTICS

We ask you to carry out a preliminary literature search in Index Medicus *or other sources (item 12) before submitting your request. Providing citations pertinent to your request will enable the search analyst to understand your question better and will clarify the scope of your interests. It will assist the analyst if the reference is correctly cited and includes the full bibliographic data: author(s), journal title, volume number, date of issue, and pagination.*

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13. SEARCH REQUIREMENTS: Please check one of the boxes below to indicate the type of search that you would prefer:

[x] A broad search designed to retrieve as many as possible of the relevant citations, but which might also retrieve many irrelevant citations.

[ ] A narrow search designed to retrieve some only of the relevant citations, but with few accompanying irrelevant citations.

NUMBER OF CITATIONS EXPECTED: Please check the appropriate box to indicate the number of journal articles dealing with the subject of your request that you consider likely to have been published since January 1966.

[ ] 0	[ ] 10 - 50	[ ] 101 - 200
[ ] 1 - 9	[xx] 51 - 100	[ ] 201 - 500
		[ ] OVER 500

14. PRINT ON:

[ ] 3" × 5" cards or [x] 8½" × 11" paper

We need to know (item 13) whether you want as many relevant citations as possible at the expense of having to sift through a fair number of unwanted articles, or whether you prefer a bibliography having as few irrelevant citations as possible, even if this means not retrieving some pertinent ones.

As a result of your having performed a preliminary search of your own, you can probably estimate the number of pertinent articles likely to have been published in the last three years. Please give us this estimate by checking the appropriate box.

Your bibliography can be printed on 3" x 5" cards or on continuous 8½" x 11" computer paper (item 14).

14

The two blank forms which follow may be removed and used for requesting a MEDLARS search.

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MEDLARS SEARCH REQUEST

DATE

Is this your first request to MEDLARS?

☐ YES ☐ NO

1. INDIVIDUAL WHO WILL ACTUALLY USE THIS BIBLIOGRAPHY
First Middle Last Name

TELEPHONE NO.

2. TITLE

3. ORGANIZATION *(Department, Bureau, Branch, Division, etc.)*

4. ORGANIZATION *(University, Corporation, Company, etc.)*

5. STREET ADDRESS AND CITY

6. STATE AND ZIP CODE

7. REQUEST SUBMITTED BY *(If different from above)*

TELEPHONE NO.

8. SEARCH ANALYST *(Leave Blank)*

ALL OF THE QUESTIONS THAT FOLLOW ARE DESIGNED TO PROVIDE INFORMATION NEEDED TO DEVELOP A BIBLIOGRAPHY THAT IS RESPONSIVE TO YOUR NEEDS. YOUR CARE IN PROVIDING FULL INFORMATION WILL AFFECT THE USEFULNESS OF THE CITATIONS THAT YOU WILL RECEIVE.

9. DETAILED STATEMENT OF REQUIREMENTS: Please describe, in your own words, the subject matter for which the search is to be conducted. Be as specific as possible. Define any terms that may have special meaning in your request. Also if there are points NOT to be included, please state these.

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(Rev. 10-68)

10. SEARCH PURPOSE: Please indicate the purpose for which this search will be used (e.g., preparation of a book, book chapter, journal article, or review article; for immediate clinical application; ongoing research; prospective research; grant application; paper presented at symposium, etc.). Give specific details that will put your request into context.

11. SEARCH LIMITATIONS: Please check all boxes that are appropriate to the scope of your request. State your needs as specifically as possible, even though we may not be able to meet these precise needs in some cases. Your replies will allow the search analyst to design a strategy that, as far as possible, will avoid types of literature that are of no interest to you.

☐ NO RESTRICTIONS

☐ HUMAN SUBJECTS

☐ VETERINARY MEDICINE: If only certain animals or animal groups are of interest, please list these:

☐ ANIMAL EXPERIMENTS: If only certain animals or animal groups are of interest, please list these:

☐ MALE

☐ NORMAL STATE

☐ DISEASED STATE

☐ FEMALE

☐ CLINICAL RESEARCH *(testing of drugs or technics in humans only)*

☐ IN VITRO STUDIES *(of animal or human tissues or fluids only)*

☐ CASE HISTORIES

LANGUAGE RESTRICTIONS:

☐ ACCEPT ALL LANGUAGES

☐ ACCEPT ONLY ENGLISH

☐ ACCEPT CERTAIN LANGUAGES ONLY *(please specify)*

AGE GROUPS: If only certain age groups are of interest, please indicate which ones:

GEOGRAPHIC RESTRICTIONS: If only certain regions are of interest, please list these:

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DATE

Is this your first request to MEDLARS?

☐ YES ☐ NO

MEDLARS SEARCH REQUEST

1. INDIVIDUAL WHO WILL ACTUALLY USE THIS BIBLIOGRAPHY

First Middle Last Name

TELEPHONE NO.

2. TITLE

3. ORGANIZATION *(Department, Bureau, Branch, Division, etc.)*

4. ORGANIZATION *(University, Corporation, Company, etc.)*

5. STREET ADDRESS AND CITY

6. STATE AND ZIP CODE

7. REQUEST SUBMITTED BY *(If different from above)*

TELEPHONE NO.

8. SEARCH ANALYST *(Leave Blank)*

ALL OF THE QUESTIONS THAT FOLLOW ARE DESIGNED TO PROVIDE INFORMATION NEEDED TO DEVELOP A BIBLIOGRAPHY THAT IS RESPONSIVE TO YOUR NEEDS. YOUR CARE IN PROVIDING FULL INFORMATION WILL AFFECT THE USEFULNESS OF THE CITATIONS THAT YOU WILL RECEIVE.

9. DETAILED STATEMENT OF REQUIREMENTS: Please describe, in your own words, the subject matter for which the search is to be conducted. Be as specific as possible. Define any terms that may have special meaning in your request. Also if there are points NOT to be included, please state these.

18?

NIH-1393-4G
(Rev. 10-68)

10. SEARCH PURPOSE: Please indicate the purpose for which this search will be used (e.g., preparation of a book, book chapter, journal article, or review article; for immediate clinical application; ongoing research; prospective research; grant application; paper presented at symposium, etc.). Give specific details that will put your request into context.

11. SEARCH LIMITATIONS: Please check all boxes that are appropriate to the scope of your request. State your needs as specifically as possible, even though we may not be able to meet these precise needs in some cases. Your replies will allow the search analyst to design a strategy that, as far as possible, will avoid types of literature that are of no interest to you.

☐ NO RESTRICTIONS

☐ HUMAN SUBJECTS

☐ VETERINARY MEDICINE: If only certain animals or animal groups are of interest, please list these:

☐ ANIMAL EXPERIMENTS: If only certain animals or animal groups are of interest, please list these:

☐ MALE

☐ FEMALE

☐ NORMAL STATE

☐ CLINICAL RESEARCH *(testing of drugs or technics in humans only)*

☐ DISEASED STATE

☐ IN VITRO STUDIES *(of animal or human tissues or fluids only)*

☐ CASE HISTORIES

LANGUAGE RESTRICTIONS:

☐ ACCEPT ALL LANGUAGES

☐ ACCEPT ONLY ENGLISH

☐ ACCEPT CERTAIN LANGUAGES ONLY *(please specify)*

AGE GROUPS: If only certain age groups are of interest, please indicate which ones:

GEOGRAPHIC RESTRICTIONS: If only certain regions are of interest, please list these:

19

12. KNOWN RELEVANT PAPERS: Please carry out a preliminary literature search of your own before submitting this request to MEDLARS, and supply full bibliographic citations below for relevant articles you have found. Wherever possible, they should be journal articles published since January 1966. These citations will be used as a guide in retrieving similar citations related to your needs. They will also be used in a later appraisal of the results of this search. If no relevant papers have been found, please state "none found".

a.

b.

c.

d.

e.

If you used INDEX MEDICUS for your preliminary search please list the subject headings under which you sought citations:

13. SEARCH REQUIREMENTS: Please check one of the boxes below to indicate the type of search that you would prefer:

☐ A broad search designed to retrieve as many as possible of the relevant citations, but which might also retrieve many irrelevant citations.

☐ A narrow search designed to retrieve some only of the relevant citations, but with few accompanying irrelevant citations.

NUMBER OF CITATIONS EXPECTED: Please check the appropriate box to indicate the number of journal articles dealing with the subject of your request that you consider likely to have been published since January 1966.

☐ 0
☐ 1 - 9
☐ 10 - 50
☐ 51 - 100
☐ 101 - 200
☐ 201 - 500
☐ OVER 500

14. PRINT ON:

☐ 3" × 5" cards or ☐ 8½" × 11" paper

12. KNOWN RELEVANT PAPERS: Please carry out a preliminary literature search of your own before submitting this request to MEDLARS, and supply full bibliographic citations below for relevant articles you have found. Wherever possible, they should be journal articles published since January 1966. These citations will be used as a guide in retrieving similar citations related to your needs. They will also be used in a later appraisal of the results of this search. If no relevant papers have been found, please state "none found".

a.

b.

c.

d.

e.

If you used INDEX MEDICUS for your preliminary search please list the subject headings under which you sought citations:

13. SEARCH REQUIREMENTS: Please check one of the boxes below to indicate the type of search that you would prefer:

☐ A broad search designed to retrieve as many as possible of the relevant citations, but which might also retrieve many irrelevant citations.

☐ A narrow search designed to retrieve some only of the relevant citations, but with few accompanying irrelevant citations.

NUMBER OF CITATIONS EXPECTED: Please check the appropriate box to indicate the number of journal articles dealing with the subject of your request that you consider likely to have been published since January 1966.

☐ 0 ☐ 10 - 50 ☐ 101 - 200

☐ 1 - 9 ☐ 51 - 100 ☐ 201 - 500

☐ OVER 500

14. PRINT ON:

☐ 3" × 5" cards or ☐ 8½" × 11" paper

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The two preceding forms may be removed and used for requesting a MEDLARS search.

5c. Submitting Requests

When the request has been completed, send it to your Regional Medical Library or nearest MEDLARS center. (See list of addresses, pages 13-15.) MEDLARS search request forms sent directly to the National Library of Medicine will be referred to the appropriate MEDLARS center.

There is no charge at present for the Demand Search Service at MEDLARS centers within the United States; however, we require that you complete a form appraising the bibliography you receive. The appraisal form will accompany your bibliography. The processing time for a demand search from the time the request is received is approximately two to three weeks.

A list of foreign MEDLARS centers is found on page 15. Users in foreign countries receiving services through the Agency for International Development (AID) may send requests to the Head, MEDLARS Management Section, Bibliographic Services Division, National Library of Medicine, 8600 Rockville Pike, Bethesda, Maryland 20014.

6. MEDLARS ORIENTATION PROGRAMS

MEDLARS search centers conduct orientation programs for groups of health science practitioners and librarians interested in becoming more familiar with MEDLARS. Slide-illustrated presentations of varying lengths (up to a full day) are offered at medical libraries, medical or dental school libraries, graduate library schools, university medical centers, state or county medical society libraries, schools of public health, etc. For further information, call your MEDLARS center, or send the form below (see pages 13 and 14 for telephone numbers and addresses).

☐ I am interested in attending a MEDLARS orientation program.

☐ I am interested in arranging a MEDLARS orientation program for a group.

_____ _____

Name Tel. No.

_____ _____

Profession Organization

_____

Address (including Zip Code)

7. AVAILABILITY OF PREVIOUSLY PREPARED BIBLIOGRAPHIES

Since Demand Searches are prepared to meet the needs of individual requesters, previously prepared bibliographies are not generally available. A selected number, however, are chosen as being of interest to a wider audience and are published as the NLM Literature Search Series. As new titles become available, they are announced through notices in the following sources: *Index Medicus, Monthly Bibliography of Medical Reviews, Journal of the American Medical Association* (Book Forum), *Journal of the American Dental Association, Drug Research Reports,* and *Public Health Reports.* This booklet contains a list of Literature Searches available as of July 1970. An up-to-date list of titles, as well as copies of the individual bibliographies, may be requested without charge from the Literature Search Program, Reference Section, National Library of Medicine, 8600 Rockville Pike, Bethesda, Maryland 20014.

8. ACCESS TO ARTICLES CITED IN BIBLIOGRAPHIES

The 2,300 journals indexed for MEDLARS are listed in the *List of Journals Indexed in Index Medicus* published annually by the Library. Access to the original publications cited, to reprints, or to copies of articles may be had from the following sources:

a. Reprints of articles are frequently available directly from the author or publisher.

b. Medical libraries in local university medical centers, medical schools, health centers, hospitals, and state or county medical societies will often have the material on hand, or, by means of union lists, know where it can be obtained through interlibrary loan.

c. Special libraries or libraries of national associations in the various fields of medicine can provide much of the literature that is indexed.

d. If your librarian cannot obtain the material through interlibrary loan elsewhere, the loan request may be directed to your Regional Medical Library, which will forward to the National Library of Medicine those requests which it is unable to fill.

AVAILABILITY OF INTERLIBRARY LOAN AND MEDLARS SEARCH SERVICES

Regions	States	Interlibrary Loan Services	MEDLARS Servires
#1—New England	Connecticut Maine Massachusetts New Hampshire Rhode Island Vermont	New England Regional Medical Library The Francis A. Countway Library of Medicine 10 Shattuck Street Boston, Massachusetts 02115 (617-734-8900, ext. 126) TWX: 710-338-6702	New England Regional Medical Library The Francis A. Countway Library of Medicine 10 Shattuck Street Boston, Massachusetts 02115 (617-734-3300, ext. 109) TWX: 710-338-6702
#2—New York	New Jersey (Northern Counties: Bergen, Essex, Hudson, Hunterdon, Middlesex, Morris, Passaic, Somerset, Sussex, Union, & Warren) New York	New York & Northern New Jersey Regional Medical Library New York Academy of Medicine 2 East 103 Street New York, N.Y. 10029 (212-876-2531) TWX: 710-581-6131	New York & Northern New Jersey Regional Medical Library New York Academy of Medicine 2 East 103 Street New York, N.Y. 10029 (212-876-8762) TWX: 710-581-6131
#3—Mid-Eastern	Delaware New Jersey (Southern Counties: Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Mercer, Monmouth, Ocean, & Salem) Pennsylvania	Mid-Eastern Regional Medical Library College of Physicians of Philadelphia 19 South 22 Street Philadelphia, Pennsylvania 19103 (215-561-6050) TWX: 710-670-1646	Mid-Eastern Regional Medical Library College of Physicians of Philadelphia 19 South 22 Street Philadelphia, Pennsylvania 19103 (215-561-6050) TWX: 710-670-1646
#4—Mid-Atlantic	Maryland North Carolina Virginia Washington, D.C. West Virginia	Mid-Atlantic Regional Medical Library P.O. Box 30260 Bethesda, Maryland 20014 (301-496-5511) TWX: 710-824-9615	Mid-Atlantic Regional Medical Library P.O. Box 30260 Bethesda, Maryland 20014 (301-496-5116) TWX: 710-824-9616
#5—East Central	Kentucky Michigan Ohio	Kentucky-Ohio-Michigan Regional Medical Library Wayne State University 4325 Brush Street Detroit, Michigan 48201 (313-577-1091) TWX: 810-221-5163	*For Kentucky & Ohio:* MEDLARS Center Health Center Library Ohio State University College of Medicine 1645 Neil Avenue Columbus, Ohio 43210 (614-422-6374) TWX: 810-482-1767 *For Michigan:* MEDLARS Center University of Michigan 3490 Kresge Medical Research Bldg. Ann Arbor, Michigan 48104 (313-763-3136) TWX: none

Regions	States	Interlibrary Loan Services	MEDLARS Servires
#6—Southeastern	Alabama Florida Georgia Mississippi Puerto Rico South Carolina Tennessee	Southeastern Regional Medical Library A. W. Calhoun Medical Library Woodruff Research Building Emory University Atlanta, Georgia 30322 (404-377-9201) TWX: 810-751-8512	MEDLARS Center Medical Center Library University of Alabama 1919 Seventh Avenue South Birmingham, Alabama 35233 (205-934-4354) TWX: 810-733-3613
#7—Midwest	Illinois Indiana Iowa Minnesota North Dakota Wisconsin	Midwest Regional Medical Library The John Crerar Library 35 West 33 Street Chicago, Illinois 60616 (312-225-2526) TWX: 910-221-5131	Midwest Regional Medical Library The John Crerar Library 35 West 33 Street Chicago, Illinois 60616 (312-225-2526) TWX: 910-221-5131
#8—Midcontinental	Colorado Kansas Missouri Nebraska South Dakota Utah Wyoming	Mid-Continental Regional Medical Library University of Nebraska Medical Center 42nd and Dewey Avenue Omaha, Nebraska 68105 (402-541-4646) TWX: 910-622-8353	MEDLARS Center Denison Memorial Library University of Colorado Medical Center 4200 East Ninth Avenue Denver, Colorado 80220 (303-394-7460) TWX: 910-938-2681
#9—South Central	Arkansas Louisiana New Mexico Oklahoma Texas	University of Texas Southwestern Medical School at Dallas 5323 Harry Hines Boulevard Dallas, Texas 75235 (214-631-3220) TWX: 910-861-4946	MEDLARS Center Texas Medical Center Jesse H. Jones Library Building Houston, Texas 77025 (713-529-0762) TWX: none
#10—Pacific Northwest	Alaska Idaho Montana Oregon Washington	Pacific Northwest Regional Health Sciences Library University of Washington Seattle, Washington 98105 (206-543-5530) TWX: 910-444-1385	Pacific Northwest Regional Health Sciences Library University of Washington Seattle, Washington 98105 (206-543-5530) TWX: 910-444-1385
#11—Pacific Southwest	Arizona California Hawaii Nevada	Pacific Southwest Regional Medical Library, Center for the Health Sciences University of California Los Angeles, California 90024 (213-825-1200) TWX: 910-342-6897	Pacific Southwest Regional Medical Library, Center for the Health Sciences University of California Los Angeles, California 90024 (213-825-5341) TWX: 910-342-6897
Pharmaceutical Manufacturers Association Members		Send requests directly to Regional Medical Library covering location.	Pharmaceutical Manufacturers Assn. 1155-15 Street, N.W. Washington, D.C. 20005 (202-296-2440)

FOREIGN MEDLARS CENTERS

Australia— MEDLARS Center
National Library of Australia
Canberra, A.C.T. 2600, Australia
TWX: 790-62100+

Canada— MEDLARS Center
National Science Library
National Research Council of Canada
100 Sussex Drive
Ottawa 7, Canada
TWX: 013-3115+

England— The U.K. MEDLARS Service
National Lending Library for Science & Technology
Boston Spa
Yorkshire, Great Britain, LS23 7BQ
TWX: 851-55442+

France— Centre MEDLARS
INSERM (Institut National de la Sante et de la Recherche Medicale)
3 rue Leon Bonnat
Paris 16e, France
TWX: none

Germany— MEDLARS Center
DIMDI (Deutsches Institut fur medizinische Dokumentation und Information)
5 Koln 41, Posfach 520480, Germany West
TWX: 888-1364+

Japan— MEDLARS Center
JICST, The Japan Information Center of Science and Technology
C.P.O. Box 1478, Tokyo, Japan
or
No. 5-2, 2 tyome, Nagatatyo
Tiyoda-Ku, Tokyo, Japan
TWX: none

Sweden— Biomedical Documentation Center
Karolinska Institutet, Fack
S-104 01 Stockholm 60 Sweden
TWX: 854-17178+

Switzerland— World Health Organization Library
Avenue Appia
1211 Geneve 27
Switzerland
TWX: 845-22335+

Aphabetical Listing of States with Region Numbers

Alabama—6
Alaska—10
Arizona—11
Arkansas—9
California—11
Colorado—8
Connecticut—1
Delaware—3
District of Columbia—4
Florida—6
Georgia—6
Hawaii—11
Idaho—10
Illinois—7
Indiana—7
Iowa—7
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Kentucky—5
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Nebraska—8
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New Hampshire—1
New Jersey (North)—2
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North Carolina—4
North Dakota—7
Ohio—5
Oklahoma—9
Oregon—10
Pennsylvania—3
Rhode Island—1
Puerto Rico—6
South Carolina—6
South Dakota—8
Tennessee—6
Texas—9
Utah—8
Vermont—1
Virginia—4
Washington—10
West Virginia—4
Wisconsin—7
Wyoming—8

The information above is effective as of July 1971. For an up-to-date listing, write: Office of Public Information, National Library of Medicine, 8600 Rockville Pike, Bethesda, Maryland 20014.

NLM PUBLICATIONS

The following publications are available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. (Remittance should accompany orders.) Prices are those in effect as of January 1971; an updated list is available from NLM on request.

CUMULATED INDEX MEDICUS

Volume 11 (1970), is a cumulation in eight volumes of the approximately 210,000 citations to articles appearing in *Index Medicus* in 1970. Included, in addition to *CIM* Author and Subject Sections, are *Medical Subject Headings, List of Journals Indexed in Index Medicus,* and *Bibliography of Medical Reviews.* Price: $84.00 ($92.25 foreign). [Volume 10 (1969): $90.50 ($100.00 foreign).]

MEDICAL SUBJECT HEADINGS

Medical Subject Headings is published as Part 2 of the January issue of *Index Medicus.* The approximately 7,600 subject headings in the 1971 *MeSH* are arranged alphabetically, with cross-references, and in categorized lists. (Included with subscription to *Index Medicus;* also available separately for $3.00)

LIST OF JOURNALS INDEXED IN INDEX MEDICUS

The 1971 *List of Journals Indexed* contains four listings of the 2,200 journals indexed in *Index Medicus*: title, abbreviation, subject, and geographical. Price $1.25.

INDEX MEDICUS

Index Medicus is published monthly as a bibliographic listing of references to current articles from approximately 2,200 of the world's biomedical journals. Each issue contains a subject and name section and a separate *Bibliography of Medical Reviews. Medical Subject Headings* ($3.00) is included as Part 2 of the January issue. Price: $63.00 ($78.75 foreign); single issues, $5.00.

ABRIDGED INDEX MEDICUS

A monthly bibliography, based on articles from 100 English-language journals, designed for the needs of the individual practitioner and libraries of small hospitals and clinics. Annual subscription price: $12.00 ($15.00 foreign); $1.00 for individual issues. Annual cumulation (1970): $10.00 ($12.50 foreign).

MONTHLY BIBLIOGRAPHY OF MEDICAL REVIEWS

The *Monthly BMR* is a series designed to provide quick guidance to the latest reviews in the journal literature of biomedicine. Each monthly issue duplicates the material appearing in the *Bibliography of Medical Reiews* section of the corresponding monthly issue of *Index Medicus.* Price for one year's subscription (twelve monthly issues): $4.50 ($5.75 foreign); single issues $0.40.

NATIONAL MEDICAL AUDIOVISUAL CENTER CATALOG

The 1970 *NMAC Catalog* lists audiovisuals available on short-term free loan to health professionals from NLM's Atlanta-based National Medical Audiovisual Center. Price: $1.25.

FILM REFERENCE GUIDE FOR MEDICINE AND ALLIED SCIENCES

Published anually for the Federal Advisory Council on Medical Training Aids. The 1970 edition contains information on approximately 2,300 films. Public Health Service Publication Number 487, revised 1970. Price: $2.75.

NLM CURRENT CATALOG

Bibliographic listing of citations to publications cataloged by the Library. Issued in three forms: (a) monthly (name section only), (b) quarterly (noncumulating, subject and name sections), and (c) annual cumulations (subject and name sections). Prices: (a) 12 monthly issues—$7.50 ($9.50 foreign); single issues, $0.65; (b) 4 three-month cumulations (quarterlies)—$13.00 ($16.25 foreign); single issues, $3.25; and (c) annual cumulation (1970)—$16.25 ($20.35 foreign); [1969 annual cumulation, price: $14.25 ($17.85 foreign).] (Eight-volume cumulation covering 1965-70: in press, price to be announced.)

TOXICITY BIBLIOGRAPHY

The quarterly *Toxicity Bibliography* covers the ad-

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verse and toxic effects of drugs and chemicals reported in the approximately 2,300 journals indexed for *Index Medicus*. Price: $14.00 per year ($17.50 foreign); single issues $3.50.

SELECTED REFERENCES ON ENVIRONMENTAL QUALITY AS IT RELATES TO HEALTH

This monthly bibliography provides a subject/author index to journal articles covering aspects of environmental pollution that concern health. Annual subscription price: $4.00 ($5.00 foreign); single issues $0.40.

A CATALOG OF SIXTEENTH CENTURY PRINTED BOOKS IN THE NATIONAL LIBRARY OF MEDICINE

Over 4,800 rare sixteenth century printed volumes from NLM's History of Medicine Division collection are listed. Some 1,500 printers and publishers and 188 different printing centers in fourteen European countries are indexed in detail. Casebound. 1967. 698 pages. Price: $5.25.

RUSSIAN DRUG INDEX

Second edition, 1967, includes the names of drugs developed in the Soviet Union, as well as those developed elsewhere but renamed in the Soviet Union. 1,800 main entries, 3,700 synonyms, arranged in three sections: Drug Index; Pharmaceutical Index; Guide to *Index Medicus* Subject Headings. Price: $2.25.

BIBLIOGRAPHY OF THE HISTORY OF MEDICINE

Number 4, 1968, is the fourth of an annual series of bibliographies on the history of medicine and related sciences, professions, and institutions. Prices: Number 2, 1966 (Public Health Service Publication Number 1540–2) $1.25; Number 3, 1967 (PHS Pub. No. 1540–3) $2.75; Number 4, 1968 (PHS Pub. No. 1540–4) $2.75. (Number 5, covering 1965-70: in press, price to be announced.)

PRINTS RELATING TO DENTISTRY

Includes reproductions of 67 prints illustrating the history of dentistry from the Library's extensive collection of pictures of nonclinical medical interests. Dates of the prints range from the 15th to 20th centuries. Public Health Service Publication Number 1605. 1967. 36 pages. Price: $0.50.

MEDLARS: 1963–1967

Comprehensive description of NLM's computer system, MEDLARS (Medical Literature Analysis and Retrieval System). 76 pages with illustrations. Public Health Service Publication No. 1823. 1968: Price: $0.75.

NLM CLASSIFICATION

The *National Library of Medicine Classification: A Scheme for the Shelf Arrangement of Books in the Field of Medicine and Its Related Sciences*. 3rd Edition, 1964, with Supplementary Pages (1969). Public Health Service Publication Number 1108, Reprinted 1969. Price: $2.75 ($3.45 foreign).

INTERNATIONAL BIBLIOGRAPHY OF MEDICOLEGAL SERIALS 1736-1967

An annotated listing of serials on legal medicine and related fields. Includes six indexes (title, editors, publishers and sponsors, subject, geographical, and chronological). 1969. Price: $1.25.

THE PRINCIPLES OF MEDLARS

A 77-page illustrated booklet designed for the user of MEDLARS publications and search services, describing the intellectual processes and interactions involved in the provision of MEDLARS bibliographies. 1970. Price: $0.75.

GUIDE TO MEDLARS SERVICES

The Guide to MEDLARS Services is available without charge from NLM. Write to: Office of Public Information, National Library of Medicine, 8600 Rockville Pike, Bethesda, Maryland 20014.

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RECURRING BIBLIOGRAPHIES

The National Library of Medicine, through its computer-based MEDLARS (Medical Literature Analysis and Retrieval System), periodically produces lists of citations to journal articles in specialized biomedical fields. Most of these lists, termed "Recurring Bibliographies," are printed and distributed by nonprofit professional organizations and other government agencies with whom the Library cooperates.

(1) The *Bibliography on Medical Education* is published monthly in the *Journal of Medical Education* ($15 per year). Cumulations for 1964-65 and 1966 are available from the Association of American Medical Colleges, 2530 Ridge Avenue, Evanston, Illinois 60201, for $2.00 each.

(2) The quarterly *Cerebrovascular Bibliography* is prepared under the auspices of the Joint Council Subcommittee on Cerebrovascular Disease, National Heart Institute, National Institutes of Health, Bethesda, Maryland 20014. Distribution is limited. For information write to the Executive Secretary, Joint Council Subcommittee on Cerebrovascular Disease.

(3) The monthly bibliography, *Fibrinolysis, Thrombolysis, and Blood Clotting*, is distributed by the National Heart Institute. For information write to Dr. James M. Stengle, National Heart Institute, National Institutes of Health, Bethesda, Maryland 20014.

(4) The monthly *Index of Rheumatology* is available from the American Rheumatism Association Section of The Arthritis Foundation, 1212 Avenue of the Americas, New York, New York 10036. Price: $6 per year ($7 foreign); $3.50 to members of the American Rheumatism Association.

(5) The quarterly *Index to Dental Literature* is sold by the American Dental Association, 211 East Chicago Avenue, Chicago, Illinois 60611. Price: $20 for four cumulative issues (including annual cumulation); $10 for annual cumulation alone.

(6) The quarterly *International Nursing Index* is sold by the American Journal of Nursing Company, 10 Columbus Circle, New York, New York 10019. Price: $25 for four cumulative issues (including annual cumulation); $20 for annual cumulation alone.

(7) The quarterly *Artificial Kidney Bibliography* is published by the National Institute of Arthritis and Metabolic Diseases. For information write to the Scientific Communication Officer, National Institute of Arthritis and Metabolic Diseases, National Institutes of Health, Bethesda, Maryland 20014. The bibliography is sold by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Price: $1.00 per year ($1.25 foreign); single issues, $0.30.

(8) The bimonthly *Endocrinology Index* is published by the National Institute of Arthritis and Metabolic Diseases, National Institutes of Health, Bethesda, Maryland 20014. The bibliography is sold by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Price: $16 per year ($20 foreign); single issues, $2.75.

(9) The *Bibliography of Surgery of the Hand,* an annual, is published and distributed by the American Society for Surgery of the Hand. For information write to John P. Adams, M.D., Chairman, American Society for Surgery of the Hand, 2150 Pennsylvania Ave., N.W., Washington, D.C. 20037.

(10) The *Anesthesiology Bibliography,* a quarterly, is published and distributed by the American Society of Anesthesiologists. For information write: Wood Library, Museum of Anesthesiology, American Society of Anesthesiologists, 515 Busse Highway, Park Ridge, Illinois 60068.

(11) The quarterly *Toxicity Bibliography* is published by the National Library of Medicine and distributed by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Price: $14 per year ($17.50 foreign); single issues, $3.50.

(12) The monthly *Current Bibliography of Epidemiology* (*CuBE*) is published by the American Public Health Association. Annual subscription price, including annual cumulation: $35 ($37 foreign). Write: Subscription Office, CuBE, American Public Health Association, 1740 Broadway, New York, New York 10032.

(13) The *Neurosurgical Biblio-Index,* a quarterly, is published by the American Association of Neurological Surgeons. For information write to the Subscription Manager, *Journal of Neurosurgery,* Suite 1230, 251 East Chicago Avenue, Chicago, Illinois 60611.

(14) The *Cranio-Facial—Cleft Palate Bibliography* is published quarterly by the American Cleft Palate Association. For information write to the Chairman,

Nomenclature Committee, Box 3098, Division of Plastic, Maxillofacial and Oral Surgery, Duke University Medical Center, Durham, North Carolina 27706.

(15) The *Index of Dermatology* is published monthly by the Universities Associated for Research and Education in Pathology, Inc. For information write to the UAREP, 9650 Rockville Pike, Bethesda, Maryland 20014.

(16) The *Recurring Bibliography of Hypertension* is published bimonthly by the American Heart Association. For subscription information write: The American Heart Association, Inc., 44 East 23rd Street, New York, New York 10010.

(17) Requests for the annual *Recurring Bibliography on Education in the Allied Health Professions* should be addressed to: Dr. Kathryn Schoen, Assistant Director, School of Allied Medical Professions, The Ohio State University, 410 West 10th Avenue, Columbus, Ohio 43210. Price: $1.00 per copy.

(18) *Parkinson's Disease and Related Disorders, Citations from the Literature,* is published monthly by the National Institute of Neurological Diseases and Stroke. For information write: NINDS, National Institutes of Health, Bethesda, Maryland 20014.

(19) *Selected References on Environmental Quality as It Relates to Health* is a monthly bibliography published by the National Library of Medicine and distributed by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Price: $4.00 ($5.00 foreign); $0.40 for individual issues.

(20) An annual *Index of Tissue Culture* is published by the Tissue Culture Association, Inc., W. Alton Jones Cell Science Center, P.O. Box 631, Lake Placid, New York 12946. A quadrennial index was published for 1966-69.

(21) The *Annual Bibliography of Orthopaedic Surgery* is published and distributed by the Ad Hoc Committee on Orthopaedic Information Services, Medical Services Division, National Research Council. For information and subscription, write to Annual Bibliography of Orthopaedic Surgery, Georgetown University Medical Center, 3800 Reservoir Road, N.W., Washington, D.C. 20007. Price: $5.00.

NATIONAL LIBRARY OF MEDICINE LITERATURE SEARCHES

These bibliographies are reprints of literature searches requested by individual physicians, scientists, and other health professionals, and are considered to be of wide interest. Single copies may be ordered by number and title from NLM at no charge. Send requests to: Literature Search Program, Reference Section, National Library of Medicine, 8600 Rockville Pike, Bethesda, Maryland 20014. (Please do not send requests on interlibrary loan forms.)

L.S. No.	Title
1–68	Clinical studies involving estrogens. Mid–1963—September 1967. (190 citations)
2–68	Neoplasm models. Mid–1963—August 1967. (79 citations)
3–68	Tumors of cold-blooded vertebrates. Mid–1963—May 1967. (123 citations)
4–68	Emergency psychiatric service. January 1964—November 1967. (60 citations)
5–68	Intrauterine contraceptive devices (IUD) and intrauterine foreign bodies. January 1964—September 1967. (362 citations)
6–68	Radioisotope diagnosis of brain neoplasms. Mid-1963—December 1967. (211 citations in English)
7–68	Computers in medicine and biology. Mid–1964—December 1967. (327 citations)
8–68	Untoward effects of iron. Mid–1963—September 1967. (178 citations)
9–68	Ethical and legal aspects of transplantation. Mid–1963—December 1967. (40 citations)
10–68	The thymus and immunity. November 1965—July 1968. (394 citations in English and French)
11–68	Transplantation of intestines and stomach. January 1964—July 1968. (46 citations)
12–68	Effects of noise on man. January 1964—July 1968. (173 citations in English)
13–68	Effect of progestational hormones and estrogens on fertility and fetal development. January 1964—June 1968. (209 citations)
14–68	Etiology and epidemiology of infectious mononucleosis. January 1944—July 1968. (39 citations)
15–68	Insect control by sexual sterilization. January 1964—August 1968. (98 citations)
16–68	Tooth transplantation. January 1964—July 1968. (90 citations)
17–68	Veterinary dentistry. January 1964—July 1968. (69 citations)
18–68	Factors in glucose tolerance in aged humans. January 1964—July 1968. (23 citations)
19–68	Coronary care units. January 1964—August 1968. (164 citations)
20–68	Indian health in the U.S. and Canada, January 1964—August 1968. (228 citations)
21–68	Computer analysis of the electroencephalogram. January 1964—August 1968. (167 citations)
22–68	Diabetes and lipid metabolism in man. January 1964—August 1968. (408 citations)
23–68	Lung transplantation. January 1964—June 1968. (169 citations)
24–68	Adverse effects of LSD. January 1964—August 1968. (112 citations)
25–68	Effect of estrogens and progrestins on carbohydrate metabolism. January 1964—August 1968. (137 citations)
26–68	Training of public health personnel. January 1964—August 1968. (181 citations)
27–68	Toxicity of pesticides to man. January 1964—August 1968. (316 citations)
28–68	Trends in administration of psychiatric hospitals. January 1964—August 1968. (172 citations in English)
29–68	Effect of physical development on adolescent personality. January 1964—August 1968. (115 citations)
30–68	Effect of hallucinogens on man. January 1966—August 1968. (303 citations)
31–68	Models of neural activity. January 1964—May 1968. (279 citations)
32–68	Transplantation of pancreas, liver, and spleen. January 1964—July 1968. (242 citations)
33–68	Hazards in the operating room. January 1964—July 1968. (73 citations)
34–68	Hydrocarbons and carcinogens as air pollutants. January 1964—July 1968. (335 citations)
35–68	Transplantation of reproductive organs. January 1964—July 1968. (55 citations)
36–68	Blood coagulation during use of oral contraceptives. January 1964—August 1968. (159 citations)
38–68	Psychological aspects of cancer. January 1964—July 1968. (146 citations in English)
39–68	Adverse effects of heart catheterization in children. January 1964—July 1968. (39 citations)
1–69	Psychotherapy in alcoholism. January 1964—August 1968. (160 citations)
2–69	Psychotherapy in drug addiction or abuse. January 1964—August 1968. (50 citations)
3–69	Psychotropic drug addiction or withdrawal symptoms in man. January 1964—August 1968. (207 citations)
4–69	Cannabis toxicology. January 1964—August 1968. (55 citations)
5–69	Heart transplantation. January 1964—August 1968. (180 citations)
6–69	Kidney transplantation in man. January 1964—June 1968. (651 citations)
7–69	Progestational or estrogenic hormones and human lipid metabolism. January 1964—August 1968. (51 citations)
8–69	Programs for rehabilitation of the aged. January 1964—August 1968. (115 citations)
9–69	Sarcoidosis. January 1966—December 1968. (546 citations)
10–69	Insect control by sexual sterilization. Supplement to L.S. 15–68. September 1968—October 1969. (59 citations)
11–69	Toxicity of pesticides to man. Supplement to L.S. 27–68. August 1968—October 1969. (241 citations)
70–1	Drug therapy of alcoholism. January 1967—December 1969. (323 citations)
70–2	Adverse effects of oral contraceptives. January 1967—December 1969. (469 citations)
70–3	Mortality of self-destructive behavior in drug abuse. January 1967—December 1969. (59 citations)
70–4	Non-nutritive sweeteners. January 1964—December 1969. (66 citations)

L.S. No.	Title
70–5	Drug abuse and crime. January 1967—December 1969. (73 citations)
70–6	The effects of diet and nutrition on learning. January 1967—December 1969. (61 citations)
70–7	Dyslexia. January 1967—December 1969. (162 citations)
70–8	Health care for the poor in the United States. January 1967—December 1969. (132 citations)
70–9	Programmed instruction in medicine and allied professions. January 1967—December 1969. (108 citations)
70–10	Computer applications in human electrocardiography. January 1964—December 1969. (284 citations)
70–11	Medical care in developing countries. January 1967—December 1969. (299 citations)
70–12	Risk of infection in the microbiology laboratory. January 1967—December 1969. (143 citations)
70–13	Adverse effects of food additives. January 1967—December 1969. (41 citations)
70–14	DOPA in neuromuscular disorders. January 1967—March 1970. (98 citations)
70–15	Psychopharmacology in geriatrics. January 1967—March 1970. (189 citations)
70–16	Control of obesity by diet. January 1967—March 1970. (98 citations)
70–17	Conditioned learning in the brain damaged child January 1967—March 1970. (75 citations)
70–18	Dietary fats and cardiovascular disease. January 1967—March 1970. (174 citations)
70–19	Medicine in Vietnam. January 1964—December 1969. (451 citations)
70–20	Medical aspects of civil disorders. January 1967—March 1970. (36 citations)
70–21	Treatment of burns. JJanuary 1967—April 1970. (523 English language citations)
70–22	Lithium in humans. January 1967—April 1970. (190 citations)
70–23	Surgery in obstructive coronary artery disease. January 1967—April 1970. (228 English language citations)
70–24	The pregnant adolescent. January 1967—April 1970. (94 English language citations)
70–25	North American Indian and eskimo health. January 1967—April 1970. (233 citations)
70–26	Fatigue countermeasures. January 1967—May 1970. (65 citations)
70–27	Enzymes and dental disease. January 1967—May 1970. (142 citations)
70–28	Amniocentesis. January 1967—May 1970. (56 citations)
70–29	Psychiatric aspects of abortion. January 1967—April 1970. (87 citations)
70–30	Automation or use of computers in laboratory diagnosis. January 1968—April 1970. (419 citations)
70–31	Teaching aids in special education. January 1967—May 1970. (116 citations)
70–32	Psychological response to hemodialysis. January 1967—May 1970. (52 citations)
70–33	Antilymphocyte serum—human applications. January 1967—April 1970. (168 citations)
70–34	Gastrin Release. January 1967—May 1970. (86 citations)
70–35	Psychological aspects of transplantation. January 1967—May 1970. (63 citations)
70–36	Clinical aspects of chelating agents. January 1967—June 1970. (517 citations)
70–37	Metal implants in humans. January 1967—June 1970. (319 citations)
70–38	Assisted circulation. January 1967—June 1970. (179 citations)
70–39	Pesticides and ecosystems. January 1967—July 1970. (527 citations)
70–40	Health aspects of mining. January 1967—July 1970. (213 citations)
70–41	Sport medicine. January 1967—July 1970. (356 citations)
70–42	Genetics and socially deviant behavior. January 1967—June 1970. (137 citations)
70–43	Prostaglandins and smooth muscles. January 1967—July 1970. (147 citations)
70–44	Psychological aspects of asthma. January 1968—September 1970. (115 citations)
70–45	Mercury contamination of water, aquatic organisms, and foods. January 1968—September 1970. (82 citations)
70–46	The arts in therapy. January 1968—September 1970. (101 citations)
70–47	Geriatric dentistry. January 1968—November 1970. (113 citations)
70–48	Group interactions for social awareness; sensitivity training. January 1968—September 1970. (99 citations)
70–49	Cyclic AMP (adenosine cyclic 3', 5'-phosphate) and adenyl cyclase. January 1968—September 1970. (656 citations)
70–50	Urban environmental pollution. January 1968—November 1970. (107 citations)
71–1	Fetal monitoring during labor. January 1966—March 1971. (137 citations)
71–2	Genetic counseling. January 1968—March 1971. (92 citations)
71–3	Transplantation in the therapy of hearing disorders. January 1968—March 1971. (258 citations)
71–4	Attitudes toward death. January 1968—March 1971. (295 citations)
71–5	Behavioral responses to animal interactions. January 1968—March 1971. (180 citations)
71–6	Health aspects of occupational exposure to X-rays. January 1968—March 1971. (57 English-language citations)
71–7	Rabies in wildlife. January 1968—March 1971. (99 citations)
71–8	Emergency psychiatry. January 1968—March 1971. (176 citations) (Supplement to LS 4–68)
71–9	DNA polymerase. January 1968—March 1971. (276 citations)
71–10	Oral manifestations of adverse drug reactions. January 1968—March 1971. (176 citations)
71–11	Psychosocial response to factors in the urban environment. Mental health services in cities. January 1968—March 1971. (233 citations)
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